

Amendment and Response

Applicant: Daniel J. Zillig et al.

Serial No.: 10/622,973

Filed: July 18, 2003

Docket No.: M120.143.101/58067US002

Title: CLEANING WIPE AND METHOD OF MANUFACTURE

REMARKS

This Amendment is concurrently filed with the accompanying RCE under 37 C.F.R. §1.114. The RCE follows the Advisory Action mailed February 1, 2006 and the Final Office Action mailed November 8, 2005. Claims 1-34 and 47-48 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tanaka et al., EP 0822093 ("Tanaka") in view of Lerner et al., U.S. Patent No. 5,198,292 ("Lerner"). Claims 35, 36, and 49-52 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tanaka in view of Lerner and further in view of Truong et al., EP 1238621 ("Truong").

With this Amendment, claims 1 and 25 have been amended, and claim 50 has been cancelled. Claims 1-36, 47, 49, 51, and 52 remain pending in the application and are presented for reconsideration and allowance.

Claim 1 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Tanaka in view of Lerner. Independent claim 1 recites a cleaning wipe including a fiber web that defines opposing faces and an intermediate region between the opposing faces. At least one of the opposing faces serves as a working surface for the cleaning wipe and the tacky material is impregnated into the fiber web such that the tacky material is present at the working surface and a level of the tacky material is greater at the intermediate region than at the working surface. These features are not taught or otherwise suggested by the cited references. In particular, the combination of Tanaka in view of Lerner described by the Examiner, fails to teach or otherwise suggest a cleaning wipe having a tacky material impregnated into a fiber web such that "the tacky material is present at the working surface and a level of tacky material is greater in the intermediate region than at the working surface" as recited in claim 1.

Tanaka discloses a pressure sensitive adhesive (PSA) cleaning sheet having a substrate 1, a PSA 2 layered on one side of the substrate 1, and a porous screen 3 layered on the PSA 2 opposite the substrate 1. The screen 3 is "disposed on the surface of the pressure-sensitive adhesive layer 2" (col. 4, l. 45-46) and is prevented from projecting beyond the surface of the PSA layer 2 opposite the substrate 1 (col. 5, l. 15-24). During use, a surface of the screen 3 opposite the PSA 2 is applied to the

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surface to be cleaned. Accordingly, the surface of the porous screen 3 opposite the PSA 2 would be the working surface of the cleaning sheet. Tanaka further teaches when the cleaning sheet is brought into contact with a member to be cleaned 4 such that the porous screen 3 (more particularly, the working surface) comes in contact with the member 4, the member to be cleaned 4 is prevented from coming in contact with the PSA layer 2 because "the porous screen 3 is projecting from the surface of the pressure-sensitive adhesive layer 2" (col. 5, l. 15-24). In this manner, the resultant cleaning sheet is substantially non-tacky. This teaching is similarly repeated throughout the specification of Tanaka (see e.g. col. 3, l. 9-12; col. 4, l. 41-46; and col. 5, l. 15-28; col. 6, l. 29-37). In view of at least the above-described passages of Tanaka, Tanaka teaches against the PSA layer 2 or any portion thereof (such as any PSA or other tack material) being present at the working surface of the cleaning wipe. In fact, even during periods of use and compression, the outer surface of the PSA 2 is "almost on the same level as the surface of the porous screen 3" (emphasis added) (col. 5, l. 33-41). In this manner, even when the cleaning sheet is in use, the tacky PSA material is not present at the working surface of the cleaning sheet. For at least this reason, Tanaka teaches against "the tacky material being present at the working surface" as recited in claim 1.

Furthermore, Tanaka fails to teach the level of tacky material being "greater in the intermediate region than at the working surface" where the tacky material is also present at the working surface as recited in claim 1. In the original rejection of claim 1 over Tanaka in view of Lerner stated in the Final Office Action, the Examiner described Tanaka as teaching the recited level of tacky material noting that the limitation of "a tacky material. . .[at such] a level. . .[that] the tacky material is greater in the intermediate region than at the working surface" does not preclude a working surface devoid of said tacky material as demonstrated by Tanaka" (Final Office Action, p. 4, paragraph 4d). However, in view of the new limitation of amended claim 1, claim 1 now precludes a working surface entirely devoid of the tacky material. Since the Examiner's statement reproduced above admits that Tanaka demonstrates a working surface

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devoid of the tacky material, Tanaka fails to teach "the tacky material being present at the working surface."

Lerner fails to alter this analysis since Lerner teaches continuous application and teaches away from variable application of any tacky material between the intermediate region and the working surface. More specifically, the Applicants disagree with the Examiner's interpretation of Lerner's "wicking." The Examiner suggests that Lerner teaches wicking of adhesive from the outer surface from which it is applied to accumulate in a center most region to leave the outer most fibers of the interior layer (second section) with less adhesive than the center most fibers (first section) (see Advisory Action Continuation Sheet). The Applicants respectfully submit that Lerner teaches directly the opposite. Lerner teaches continuous and even impregnation of the PSA throughout the entire cleaning wipe. (Abstract; col. 8, l. 35-38). More specifically, formation according to Lerner uses a water based emulsion comprising a mixture of a tackifier and a PSA that form agglomerates of the tackifier and PSA at fiber interstices (col. 8, l. 24-37). The continuous and even impregnation and distribution of the tackifier and PSA in the cloth 10 is further emphasized with reference to FIG. 3, which clearly shows even or uniform impregnation and distribution of the tacky materials 14 without any variation in the level of tacky material applied between an intermediate region and a working surface of the cleaning cloth 10.

With the above in mind, none of the cited references teach or otherwise suggest a cleaning wipe where tacky material is impregnated into a fiber web such that "the tacky material is present at the working surface and a level of tacky material is greater in the intermediate region than at the working surface" as recited in claim 1.

Replacing the PSA layer 2 of Tanaka with the tacky cloth 10 of Lerner as suggested by the Examiner fails to alter this analysis. More specifically, due to the above-described teachings of Tanaka, the Lerner cloth 10 would be positioned relative to the porous screen 3 of Tanaka in a similar manner as the PSA layer 2 of Tanaka. As such, incorporating the Lerner cloth 10 into Tanaka in place of the PSA layer 2 would still result in the member to be cleaned 4 being prevented from coming in contact with

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the Lerner cloth 10 when the porous screen 3 (more particularly, the working surface) comes in contact with the member 4 because the porous screen 3 projects from the surface of the Lerner cloth.

Additionally, independent claim 1 recites that the fiber web defines the working surface. Viewing the cleaning sheet of Tanaka in view of such limitations suggests that since the porous screen 3 of Tanaka contacts the surface to be cleaned as described above, the porous screen 3 may be seen as the fiber web of claim 1. However, even if the cloth 10 of Lerner were considered to be impregnated and replaced the PSA layer 2 of Tanaka, the tacky material of Lerner would not extend onto the porous screen 3 as described above. Therefore, despite the teachings of an impregnated cloth of Lerner, the teaching of Tanaka would discourage the tacky material extending beyond the cloth an onto the porous screen. As such, Tanaka discourages the tacky material being impregnated into the porous screen 2 itself rather than the Lerner cloth. Accordingly, Tanaka teaches away from the “tacky material [being] impregnated into the fiber web” where the fiber web defines the working surface as recited in claim 1 in any manner or level, nevertheless, in the manner and at the levels recited in claim 1.

For at least the above-described reasons, the Tanaka and Lerner combination touted by the Examiner, the cited combination fails to teach or otherwise suggest the limitations of amended, independent claim 1, in particular, the tacky material being present at the working surface.

In addition, the Applicants maintain the original position presented in the Amendment and Response received by the Patent and Trademark Office on January 9, 2006, contending that there is no requisite suggestion to combine Tanaka with Lerner. More specifically, the references teach away from modification replacing the PSA 2 of Tanaka with the Lerner cloth 10 as described by the Examiner as it would likely destroy or at least greatly diminish the desired function and purpose of Tanaka. The resulting cleaning sheet from the Tanaka/Lerner combination would not have the desired adhesive levels to capture particles from a member being cleaned. More particularly, the adhesive levels of the Lerner are specifically limited as compared to the Tanaka

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PSA 2 to produce a less sticky Lerner cloth 10 that still maintains particles (col. 3, l. 38-42; col. 5, l. 47-55). Therefore, since placing the Lerner cloth 10 beneath the porous screen 3 of Tanaka would limit the surface area of the Lerner cloth contacting the surface to be cleaned, the already tempered adhesiveness of Lerner would further be limited in the resultant cleaning sheet. The limited adhesion would provide a non- or less effective resultant cloth for adhering to or maintaining particles. The lack of adhesion would further render the resultant cleaning unsatisfactory for its intended purpose. Therefore, the cited references failed to provide desirability of combining the teachings of Tanaka and Lerner.

For at least these reasons, the features of amended, independent claim 1 are not taught or otherwise suggested by the cited references. Consequently, independent claim 1 is believed to be allowable, and the Applicants respectfully request the rejections of independent claim 1 be withdrawn.

Dependent claims 2-24, 47, and 49 were also rejected under 35 U.S.C. §103(a) as being unpatentable under Tanaka in view of Lerner or unpatentable over Tanaka in view of Lerner further in view of Truong. Each of dependent claims 2-24, 47, and 49 depend from independent claim 1, which, as described above, is believed to be allowable over the cited references. Therefore, dependent claims 2-10, 12-24, 47, and 49 are also believed to be allowable over the cited references. Truong fails to alter this analysis. Accordingly, the withdrawal of the rejections of claims 2-10, 12-24, 47, and 49 is respectfully requested.

In addition, these dependent claims present additional, patentably the distinct subject. In particular, dependent claims 5, 6, 10, and 49 recite additional patentably distinct subject matter for reasons previously described in the Amendment and Response received by the Patent and Trademark Office on January 9, 2006. Moreover, as described above with respect to claim 1, Applicants disagree with the Examiner's interpretation of Lerner's "wicking," and believes that Lerner teaches continuous and even impregnation of the PSA throughout the entire cleaning wipe (Abstract; col. 8, l. 35-38). The continuous and even impregnation is in direct contrast to the limitations of,

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for example, dependent claims 5, 6, 7, and 8-10. Accordingly, this above-described reason provides further support for the allowance of claims 5, 6, 7, and 8-10 over the cited references.

Claims 25-34, 51 and 52 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tanaka in view of Lerner or as being unpatentable over Tanaka in view of Lerner further in view of Truong. Amended, independent claim 25 recites similar limitations as described above with respect to independent claim 1, in particular, a cleaning wipe wherein at least some of the tacky material is present at a working surface during periods of non-use. As described above with respect to independent claim 1, none of the cited references alone or in combination teach or otherwise suggest such a limitation. Therefore, independent claim 25 is believed to be allowable for similar reasons as described above with respect to independent claim 1.

Furthermore, also as described in the Amendment and Response received by the Patent and Trademark Office on January 9, 2006, the Examiner's calculations of the level of PSA provided in the cleaning sheet are based upon a solid layer of the PSA having a thickness of 30 microns rather than on a level of impregnation as recited in independent claim 25. Further, if Tanaka is combined with Lerner, as suggested by the Examiner, no solid layer of PSA will be applied and, therefore, the amount of PSA in the resultant cloth will be decreased drastically due to substitution of the Lerner cloth 10, which as described above is formed to limit the amount of PSA and tackiness (see Lerner, col. 3, l. 61-64). In fact, since in the resultant cleaning sheet, the only thing impregnated will be the Lerner cloth 10, which is specifically designed to reduce the amount of PSA used and as recited by the Examiner in the Advisory Action Continuation Sheet is not "relied upon to teach the level of adhesive to be used in the combined article" as recited in independent claim 25.

For at least the above-described reasons, independent claim 25 is not taught or otherwise suggested by the cited references, and is, therefore, believed to be allowable. Accordingly, withdrawal of the associated rejections is respectfully requested.

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Dependent claims 26-36, 51, and 52, which were also rejected 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Lerner or over Tanaka in view of Lerner further in view of Truong, each depend from independent claim 25. As described above, independent claim 25 is believed to be allowable over the cited references. Therefore, dependent claims 26-36, 50, and 52 are also believed to be allowed over the cited references. Accordingly, withdrawal of claims 26-36, 50, and 52 is respectfully requested.

CONCLUSION

In view of the above, the Applicants respectfully submit that pending claims 1-36, 47, 49, 51, and 52 are in a condition for allowance. Therefore, reconsideration and withdrawal of the rejections and allowance of claims 1-36, 47, 49, 51, and 52 are respectfully requested.

Applicants hereby authorize the Commissioner for Patents to charge Deposit Account No. 50-0471 the amount of \$790.00 to cover the RCE fees as set forth under 37 C.F.R. 1.17(e).

The Examiner is invited to telephone the Applicants' representative at the below-listed numbers to facilitate prosecution of this application. Any inquiry regarding this Amendment should be directed to Timothy A. Czaja at Telephone No. (612) 573-2004, Facsimile No. (612) 573-2005 or Eloise J. Maki at Telephone No. (651) 737-8859, Facsimile No. (651) 736-3853.

In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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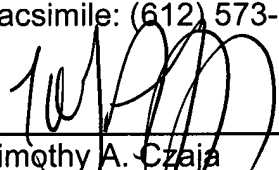
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CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 8th day of March, 2006.

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